

## REMARKS

Claims 25-37. have been added. Claims 8-37 remain for further consideration.

The rejections shall be taken up in the order presented in the Official Action.

1. Claims 8, 10-11, 16, 18-19, 20 and 22 currently stand rejected for allegedly being anticipated by the subject matter disclosed in U.S. Patent 4,415,856 to Welles (hereinafter "Welles").

### Claim 8

Claim 8 recites an integrated circuit sensor that includes a comparator and an output stage. The output stage receives a " ... *plurality of comparator output signals and encodes state information associated with said plurality of comparator output signals to provide on a integrated circuit lead an encoded output signal indicative of said state information associated with said plurality of comparator signals.*" (emphasis added, cl. 8). Welles neither discloses (nor suggests) a system that provides such an encoded output signal on a integrated circuit lead. As illustrated in FIG. 1, Welles provides the output signal on four output leads (0-3). Welles states "[t]he conversion of the comparator output signals to a digitally-encoded magnetic member position signal is carried out by means of a plurality of exclusive-OR-gates 36 and a diode matrix 38. In the illustrated example, the 16 possible magnetic member positions may be resolved in an associated **four-bit digital output signal.**" (emphasis added, col. 4, lines 58-63). Accordingly, a fair and proper reading of Welles reveals that the output signal is provided as a four-bit output signal on four leads/lines 40-0, 40-1, 40-2 and 40-3. A 35 U.S.C. §102 rejection requires that a single reference teach each and every element of the claimed invention. Hence, it is respectfully submitted that Welles is incapable of anticipating claim 8.

### **Claim 16**

Claim 16 recites an integrated circuit sensor that includes a transducer element and a comparator. The integrated circuit element also includes:

“an output stage that receives said plurality of comparator output signals and encodes switching state information associated with said plurality of comparator output signals to provide on a bi-directional integrated circuit lead an encoded output signal indicative of said state information associated with said plurality of comparator signals.” (emphasis added, cl. 16).

Welles does not disclose providing an encoded output signal, or any output signal, *on a bi-directional integrated circuit lead*. As set forth above with respect to claim 1, Welles discloses providing the output signal on four leads: - 40-0, 40-1, 40-2 and 40-3. A 35 U.S.C. §102 rejection requires that a single reference teach each and every element of the claimed invention. Hence, Welles is incapable of anticipating claim 16.

### **Claim 20**

Claim 20 recites an integrated circuit sensor that includes a transducer element, an amplifier and a comparator network. The integrated circuit sensor also includes:

“an output stage that receives said plurality of comparator output signals and encodes switching state information associated with said plurality of comparator output signals to provide **on a integrated circuit lead** an encoded output signal indicative of said state.” (emphasis added, cl. 20).

As set forth above with respect to claim 8, Welles neither discloses nor suggests an output stage that encodes state information to provide an encoded output signal on a integrated circuit lead. Welles provides the output signal on a plurality of leads, rather than the output lead as recited in claim 20. A 35 U.S.C. §102 rejection requires that a single reference teach each and every element of the claimed

invention. Hence, Welles is incapable of anticipating claim 20.

Dependent claims 25-37 have been added.

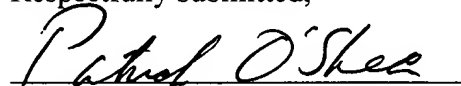
3. The indication that claims 9, 12-15, 17, 21 and 23-24 contain allowable subject matter is noted and appreciated.

These claims have not been rewritten into independent claim format since it is respectfully submitted that the independent claims from which they depend, either directly or indirectly, are allowable for at least the reasons set forth above.

For all the foregoing reasons, reconsideration and allowance of claims 8-37 is respectfully requested.

If a telephone interview could assist in the prosecution of this application, please call the undersigned attorney.

Respectfully submitted,



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